

# **BUREAU OF ENVIRONMENT CONFERENCE REPORT**

**SUBJECT:** Monthly SHPO-FHWA-ACOE-NHDOT Cultural Resources Meeting

**DATE OF CONFERENCES:** April 30, 2015

**LOCATION OF CONFERENCE:** John O. Morton Building

## **ATTENDED BY:**

### **NHDOT**

Joe Adams  
Bob Juliano  
Ron Crickard  
Jillian Edelmann  
Marc Laurin  
Bill Saffian  
David Scott

### **NHDHR**

Laura Black  
Edna Feighner

**Federal Highway  
Administration –  
Via teleconference**  
Jamie Sikora

### **VTRANS-**

**Via Teleconference:**  
Judith Ehrlich  
Dan Landry

**Stantec –  
Via Teleconference**  
Mike Leach

## **PROJECTS/PRESENTATIONS REVIEWED THIS MONTH:**

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### **Lyme-Thetford 14460, A000(394)**

Participants: Bob Juliano, Ron Crickard, NHDOT; Dan Landry, Judith Ehrlich, VTRANS; Mike Leach, Stantec

Bob Juliano, filling in for Bob Landry, began the meeting with a presentation about the truss bridge (053/112) and project location. The presentation included aerial photos of the bridge, a brief history, and photos of each quadrant of the bridge in VT and NH, as well as an aerial view of the Area of Potential Effect (APE). B. Juliano stated that the project would be limited to the bridge and minor approach work. B. Juliano then summarized what tasks have been completed to date; which included the on-site initial meeting with NHDHR, NHDOT-BOE, and VTrans in August 2013; in-depth structural inspection September-October 2013; underwater pier inspection August 2013; pier concrete sampling and testing in October 2013; Load Rating analysis January to May 2014 and Public Information Meeting in Lyme on July 23, 2014.

The presentation continued with a review of the inspection reports, including the deterioration of the stringers, steel bridge rail and curb, Vermont abutment, and pier above and below water. It was noted that the NH abutment is in better condition than the VT abutment.

B. Juliano discussed the rehabilitation effort for the bridge which would likely include replacement of the end floor beams and all the stringers; replacement of the concrete deck and curb; replacement of the bridge rails; paint all steel truss components; repair abutments; and replace pier. Dan Landry asked if cores had been taken of the concrete pier. B. Juliano said, "Yes" and that the cores revealed ASR (alkali-silica reactivity) and low air content and that the recommendation is that the pier should be replaced. B. Juliano discussed options for addressing the pier; encapsulate the pier stem with new concrete; rebuild the pier in kind; construct new two column drilled shaft pier. Encapsulating the pier is not considered a long-term repair and is not recommended. Replacement of the pier with a two column drilled shaft pier will likely be recommended due to the deep water at the site. B. Juliano showed a photo simulation of what the two column pier would look like.

B. Juliano provided a summary of the rehabilitation work, including: rehabilitation of the bridge to carry legal loads; minor approach roadway work; two construction seasons anticipated; first season to complete structural repairs; second season to paint the steel truss components; the bridge would need to be closed during construction; estimated construction cost \$4.5m. B. Juliano identified the next steps of project progression, they include: develop and evaluate alternates; review constructability and access to the site; public information meeting in Thetford, VT; continue Section 106 process in both states; complete the NEPA process; develop preliminary plans and final contract plans and documents.

The first Cultural Resource Agency Coordination meeting was held on August 14, 2014 and Mike Leach from Stantec provided an update from that meeting. A New Hampshire individual inventory form on the bridge has been completed and an individual inventory form for the house in NE quadrant (NH) is currently being completed. Judith Ehrlich asked if individual inventory forms would be needed in VT. Mike Leach said Stantec will be coordinating with VT to determine if inventory is necessary and to ensure the proper forms are used. Jill Edelmann will send J. Ehrlich a copy of the NH bridge inventory form that was completed.

D. Landry asked who the project manager is, and what the schedule for advertising is. B. Juliano said Bob Landry is the project manager for NH and that at this time the schedule for advertising is likely November of 2021. J. Edelmann will continue coordination with identified consulting party Tim Cook. In a phone conversation with him prior to this meeting he mentioned the possibility of the Upper Valley Lake Sunapee Regional Planning Commission (UVLSRPC) requesting the project be moved up in the States 10-Year Plan schedule.

D. Landry and J. Ehrlich asked, in order to complete the scoping effort is there anything NHDOT needs from VT. B. Juliano and J. Edelmann replied that this meeting was specifically for a status update and that currently we are not waiting on VT to advance the project forward.

Laura Black asked how coordination is taking place with VT & NH to ensure that appropriate forms are being used and filled out, and the appropriate process is being followed. Mike Leach responded that Stantec is dealing directly with VT & NH.

J. Edelmann will mail a copy of the PowerPoint and minutes to Tim Cook. NH will continue coordination with VT as project plans progress.

**Stewartstown-Canaan 15838, A000(984)**

Participants: David Scott, Bill Saffian, Marc Laurin, NHDOT; Dan Landry, Judith Ehrlich, VTRANS

Continued consultation on the red listed bridge over the Connecticut River (054/163) to achieve an effects memo determination. Bill Saffian gave a brief description of the scope of the project including the replacement of the deck, upgrading the rail, replacement of select superstructure steel components, removing and rebuilding the top of the VT abutment, repairing deteriorated areas of the VT thrust block and minor road and drainage work on the VT approach.

B. Saffian discussed that riveting the new steel components, rather than bolting as proposed, was further investigated by Bridge Design. The fabricator of the Longfellow Bridge in MA, which is being rehabilitated using rivets was contacted and his facilities were toured. They are only doing shop riveting as they have found that there are concerns with field fabrication, mainly with getting and keeping the rivets at the right temperature, and there are other issues of concern, such as painting. They have had 50% failure rates and the costs are excessive. Due to these many concerns, the Department does feel that riveting is appropriate for the rehabilitation. Laura Black agreed that riveting is not a viable option. B. Saffian discussed that the Department has also determined that some pieces in hard to reach locations where bolting is problematic will need to be welded. These welded areas will be hidden from view behind cover plates and no bolt ends will show. Dan Landry asked if these areas would be able to be properly inspected by bridge inspectors. B. Saffian thought that they would be able to see some components. D. Landry suggested that these areas be galvanized to increase their longevity. NHDOT will further evaluate the treatment of these locations.

Jill Edelmann asked for conclusions on the effects of the rehabilitation of the bridge. L. Black concurs that the proposed rehabilitation is being done in sympathetic manner and based on the research that riveting is not viable. She noted that the effects memo should note how the welds will need to be monitored. Judith Ehrlich asked if the rail posts would be the same spacing. B. Saffian discussed that the existing rails are spaced with the floor joints and are currently attached to the beams. These caused some of the issues with the corrosion at the joints. The proposed rail posts will have smaller spacing (8 feet vs 10 feet), will avoid the joints and will not be attached to the beams as this would not meet the crash testing requirements. The visual effects would not be very visible. J. Ehrlich agreed that the rehabilitation is a No Adverse Effect on the bridge. The Effects memo will be signed by both States and both FHWA Divisions. Jamie Sikora agreed, he will coordinate with the FHWA VT Division. J. Edelmann will draft the Effects memo with the goal of getting it signed and finalized within 30 days.

**Lebanon-Hartford 16148, A001(154)**

Participants: Joe Adams, Marc Laurin NHDOT; Dan Landry, Judith Ehrlich, VTRANS

Jill Edelmann initiated discussion on the I-89 bridges regarding any cultural resource concerns on the VT side. She stated that NHSHPO has reviewed the project and there are no cultural concerns on the NH side. Joe Adams pointed out that a Phase 1A archaeology done in 2013 identified three

area of sensitivity in VT. J. Edelmann will touch base with Jen Russell to see where the archaeological investigations in VT stand.

**Lancaster-Guildhall 16155 A000(159)**

Participants: Joe Adams, Marc Laurin, NHDOT; Dan Landry, Judith Ehrlich, VTRANS

Continued consultation to update on project status and discuss mitigation options for the Roger's Rangers Bridge. An Adverse Effect memo will be signed once archaeology is completed.

Joe Adams provided a brief description of the project. The Phase II archaeological investigation is to be completed in the Fall of 2015. On behalf of Bob Landry, NHDOT Project Manager, who could not attend this meeting, J. Adams relayed the previous discussions with Scott Newman (previous VTrans point of contact) on the potential for using the rehabilitation of the Villas Bridge as mitigation. B. Landry has discussed with the NHDOT's Assistant Commissioner that mitigation should be reassessed as the costs of the rehabilitation of the Villas Bridge would be \$4M versus the \$10M cost of replacing the Lancaster-Guildhall Bridge. Additionally, the repair of the Villas Bridge is currently on hold with no funding mechanism available. Jill Edelmann stated that it does not make sense for the Lancaster-Guildhall project to make a commitment that may or may not be met since there are so many uncertainties with the Villas Bridge. Regarding mitigation for the Adverse Effect, she stated that B. Landry mentioned mitigation banking of a certain amount that could be dedicated to the Villas Bridge or another bi-state bridge as a possibility. Jamie Sikora stated that a bi-state decision on the Villas Bridge will need to occur when a new NHDOT Commissioner is appointed, in discussion with the VTrans Commissioner. All agreed that it is time to get resolution on the Villas Bridge and this is an issue that needs to be resolved at a higher level.

A discussion ensued on photo documentation of the bridge. L. Black asked if there was any benefit to further documentation and if there were any opportunities for a plaque from the bridge to be displayed with an interpretive sign discussing the truss bridge in a pocket park along the proposed sidewalk. J. Adams described that the sidewalk was mainly for snowmobile use. There may not be much use of a pocket park in this location. J. Ehrlich has expectation that some documentation needs to be done for the VT programmatic process. She will send examples to J. Edelmann of what would be required.

Submitted by: Sheila Charles and Jill Edelmann, Cultural Resources

<http://www.nh.gov/dot/org/projectdevelopment/environment/units/technicalservices/crmeetings.htm>